7. GDMO Definitions

7

7.1. Overview

The GDMO interface definitions provided below support the SOA to NPAC SMS interface and the NPAC SMS to Local SMS interface. Included in this chapter of the interface specification are object name bindings, attribute, package, action, and notification definitions.

7.2. - Object Definitions

```
-- 1.0 LNP Audits Managed Object
InpAudits MANAGED OBJECT CLASS
    DERIVED FROM "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2 : 1992":top;
    CHARACTERIZED BY
        lnpAuditsPkg;
    REGISTERED AS {LNP-OIDS.lnp-objectClass 1};
lnpAuditsPkg PACKAGE
    BEHAVIOUR
        lnpAuditsDefinition,
        lnpAuditsBehavior;
    ATTRIBUTES
        lnpAuditsName GET;
lnpAuditsDefinition BEHAVIOUR
    DEFINED AS !
        The lnpAudits class is the managed object that is used as
        the container object for the subscriptionAudit objects on the
        NPAC SMS. This object has been created for scoping efficiency.
    !;
lnpAuditsBehavior BEHAVIOUR
    DEFINED AS !
        NPAC SMS Managed Object for the SOA to NPAC SMS interface.
        The service provider SOA can M-GET any lnpAudits object on the
        NPAC SMS. (SOA Management Association Function).
        The Local SMS can not M-GET any lnpAudits object on the NPAC SMS.
        The lnpAuditsName attribute is read only and can not
        be changed via the Local SMS or SOA Interface once the object has
        been created. The value of lnpAuditsName will always be "lnpAudits".
        Only one of these objects will exist per agent and it will only be
         created at startup of the CMIP agent software on the NPAC SMS.
     !;
```

```
-- 2.0 LNP Local SMS Managed Object Class
lnpLocalSMS MANAGED OBJECT CLASS
    DERIVED FROM "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2: 1992":top;
    CHARACTERIZED BY
        lnpLocalSMS-Pkg;
    REGISTERED AS {LNP-OIDS.lnp-objectClass 2};
InpLocalSMS-Pkg PACKAGE
    BEHAVIOUR
        InpLocalSMS-Definition,
        lnpLocalSMS-Behavior;
    ATTRIBUTES
        lnpLocal-SMS-Name GET;
InpLocalSMS-Definition BEHAVIOUR
    DEFINED AS !
        The lnpLocalSMS class is the managed object that is used as the
        container object for all Local SMS data in the NPAC SMS to
        Local SMS Interface.
    1:
lnpLocalSMS-Behavior BEHAVIOUR
    DEFINED AS !
        Local SMS Managed Object.
        The NPAC SMS can M-GET any lnpLocalSMS object (Data Download
        Association Function).
        The lnp-LocalSMS-Name attribute is read only and can not
        be changed via the Local SMS Interface once the object has
        been created. The value of lnpLocal-SMS-Name will always be
         a unique identifier for the Local SMS for the NPAC SMS to
        Local SMS Interface.
        Only one of these objects will exist and it will only be
         created at startup of the CMIP agent software on the Local
         SMS.
     1:
-- 3.0 LNP Log Record for the Subscription Audit Local SMS Discrepancy Report
 lnpLogAudit-DiscrepancyRptRecord MANAGED OBJECT CLASS
     DERIVED FROM "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2: 1992":eventLogRecord;
     CHARACTERIZED BY
         lnpLogAudit-DiscrepancyRptPkg;
     REGISTERED AS {LNP-OIDS.lnp-objectClass 3};
 lnpLogAudit-DiscrepancyRptPkg PACKAGE
     BEHAVIOUR
         lnpLogAudit-DiscrepancyRptDefinition,
         lnpLogAudit-DiscrepancyRptBehavior;
     ATTRIBUTES
         auditDiscrepancyTn GET,
         auditDiscrepancyVersionId GET,
         auditDiscrepancyLSMS-SP-Id GET,
         auditDiscrepancyFailureReason GET,
         accessControl GET;
 lnpLogAudit-DiscrepancyRptDefinition BEHAVIOUR
     DEFINED AS !
         The lnpLogAudit-DiscrepancyRptRecord class is the managed
         object that is used to create log records for the
         subscriptionAudit-DiscrepancyRpt Notification.
     !;
```

```
lnpLogAudit-DiscrepancyRptBehavior BEHAVIOUR
    DEFINED AS !
       This log record can be used by any CME wanting to log the
        subscriptionAudit-DiscrepancyRpt Notification.
-- 4.0 LNP Log Record for the Subscription Audit Results
lnpLogAuditResultsRecord MANAGED OBJECT CLASS
    DERIVED FROM "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2 : 1992":eventLogRecord;
    CHARACTERIZED BY
        lnpLogAuditResultsPkg;
    REGISTERED AS {LNP-OIDS.lnp-objectClass 4};
lnpLogAuditResultsPkg PACKAGE
    BEHAVIOUR
        lnpLogAuditResultsDefinition,
        lnpLogAuditResultsBehavior;
    ATTRIBUTES
        auditResultStatus GET,
        auditResultFailed-SP-List GET,
        auditResultNumberDiscrepancies GET,
        auditResultCompletionTime GET,
        accessControl GET;
lnpLogAuditResultsDefinition BEHAVIOUR
    DEFINED AS !
        The lnpLogAuditResultsRecord class is the managed object
        that is used to create log records for the
        subscriptionAuditResults Notification.
    !;
lnpLogAuditResultsBehavior BEHAVIOUR
    DEFINED AS !
        This log record can be used by any CME wanting to log the
         subscriptionAuditResults Notification.
     !:
 -- 5.0 LNP Log Record for the Subscription Version Cancellation
-- Acknowledge Request Notification
 lnpLogCancellationAcknowledgeRequestRecord MANAGED OBJECT CLASS
     DERIVED FROM "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2: 1992":eventLogRecord;
     CHARACTERIZED BY
         lnpLogCancellationAcknowledgeReguestPkg;
     REGISTERED AS {LNP-OIDS.lnp-objectClass 5};
 lnpLogCancellationAcknowledgeRequestPkg PACKAGE
     BEHAVIOUR
         lnpLogCancellationAcknowledgeRequestDefinition,
         lnpLogCancellationAcknowledgeRequestBehavior;
     ATTRIBUTES
         subscriptionTN GET,
         subscriptionVersionId GET,
         accessControl GET;
 lnpLogCancellationAcknowledgeRequestDefinition BEHAVIOUR
     DEFINED AS !
         The lnpLogCancellationAcknowledgeRequestRecord class is
         the managed object that is used to create log records for the
         \verb|subscriptionVersionCancellationAcknowledgeRequest|\\
         Notification.
     !;
```

```
lnpLogCancellationAcknowledgeRequestBehavior BEHAVIOUR
    DEFINED AS !
        This log record can be used by any CME wanting to log the
        subscriptionVersionCancellationAcknowledgeRequest
    !;
-- 7.0 LNP Log Record for the Subscription Version New SP Create Request
       Notification
lnpLogNewSP-CreateRequestRecord MANAGED OBJECT CLASS
    DERIVED FROM "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2: 1992":eventLogRecord;
    CHARACTERIZED BY
        lnpLogNewSP-CreateRequestPkg;
    REGISTERED AS {LNP-OIDS.lnp-objectClass 7};
lnpLogNewSP-CreateRequestPkg PACKAGE
    BEHAVIOUR
        lnpLogNewSP-CreateRequestDefinition,
        lnpLogNewSP-CreateRequestBehavior;
    ATTRIBUTES
        subscriptionTN GET,
        subscriptionVersionId GET,
        subscriptionOldSP GET,
        subscriptionOldSP-DueDate GET,
        subscriptionOldSP-Authorization GET,
        subscriptionOldSP-AuthorizationTimeStamp GET,
        subscriptionStatusChangeCauseCode GET,
        accessControl GET;
lnpLogNewSP-CreateRequestDefinition BEHAVIOUR
     DEFINED AS !
         The lnpLogNewSP-CreateRequestRecord class is the managed
         object that is used to create log records for the
         subscriptionVersionNewSP-CreateRequest Notification.
     !:
lnpLogNewSP-CreateRequestBehavior BEHAVIOUR
     DEFINED AS !
         This log record can be used by any CME wanting to log the
         subscriptionVersionNewSP-CreateRequest Notification.
     ! ;
 -- 8.0 LNP Log Record for the Subscription Version Old SP Concurrence Request
        Notification
 lnpLogOldSP-ConcurrenceRequestRecord MANAGED OBJECT CLASS
     DERIVED FROM "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2 : 1992":eventLogRecord;
     CHARACTERIZED BY
         lnpLogOldSP-ConcurrenceRequestPkg;
     REGISTERED AS {LNP-OIDS.lnp-objectClass 8};
 lnpLogOldSP-ConcurrenceRequestPkg PACKAGE
     BEHAVIOUR
         lnpLogOldSP-ConcurrenceRequestDefinition,
         lnpLogOldSP-ConcurrenceRequestBehavior;
     ATTRIBUTES
         subscriptionTN GET,
         subscriptionVersionId GET,
         subscriptionNewCurrentSP GET,
         subscriptionNewSP-DueDate GET,
         subscriptionNewSP-CreationTimeStamp GET,
         accessControl GET;
```

```
lnpLogOldSP-ConcurrenceRequestDefinition BEHAVIOUR
    DEFINED AS !
        The lnpLogOldSP-ConcurrenceRequestRecord class is the managed
        object that is used to create log records for the
        subscriptionVersionOldSP-ConcurrenceRequest Notification.
    !;
lnpLogOldSP-ConcurrenceRequestBehavior BEHAVIOUR
    DEFINED AS !
        This log record can be used by any CME wanting to log the
        subscriptionVersionOldSP-ConcurrenceRequest Notification.
    1:
-- 9.0 LNP Log Record for the NPAC SMS Operational Information Notification
lnpLogOperational-InformationRecord MANAGED OBJECT CLASS
    DERIVED FROM "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2: 1992":eventLogRecord;
    CHARACTERIZED BY
        lnpLogOperational-InformationPkg;
    REGISTERED AS {LNP-OIDS.lnp-objectClass 9};
lnpLogOperational-InformationPkg PACKAGE
    BEHAVIOUR
        lnpLogOperational-InformationDefinition,
        lnpLogOperational-InformationBehavior;
    ATTRIBUTES
        downTime GET,
        npacContactNumber GET,
        additionalDownTimeInformation GET,
        accessControl GET;
lnpLogOperational-InformationDefinition BEHAVIOUR
    DEFINED AS !
        The lnpLogOperational-InformationRecord class is the managed object
         that is used to create log records for the
         lnpNPAC-SMS-Operational-Information Notification.
lnpLogOperational-InformationBehavior BEHAVIOUR
     DEFINED AS !
         This log record can be used by any CME wanting to log the
         lnpNPAC-SMS-Operational-Information Notification.
     !;
 -- 10.0 LNP Log Record for the Subscription Version Status Attribute Value
        Change Notification
 lnpLogStatusAttributeValueChangeRecord MANAGED OBJECT CLASS
     DERIVED FROM "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2 : 1992":eventLogRecord;
     CHARACTERIZED BY
         lnpLogStatusAttributeValueChangePkg;
     CONDITIONAL PACKAGES
         subscriptionVersionAttributeValueChangeFailed-SP-ListPkg PRESENT IF
             !the version status is failed or partially failed!,
         subscriptionStatusChangeCauseCodePkg PRESENT IF
             !the the version status is set to conflict by the old service
              provider!;
     REGISTERED AS {LNP-OIDS.lnp-objectClass 10};
 lnpLogStatusAttributeValueChangePkg PACKAGE
     BEHAVIOUR
         lnpLogStatusAttributeValueChangeDefinition,
```

```
lnpLogStatusAttributeValueChangeBehavior;
   ATTRIBUTES
       subscriptionVersionAttributeValueChangeInfo GET,
        accessControl GET;
lnpLogStatusAttributeValueChangeDefinition BEHAVIOUR
    DEFINED AS !
        The lnpLogStatusAttributeValueChangeRecord class is the managed
        object that is used to create log records for the
        subscriptionVersionStatusAttributeValueChange Notification.
lnpLogStatusAttributeValueChangeBehavior BEHAVIOUR
    DEFINED AS !
        This log record can be used by any CME wanting to log the
        subscriptionVersionStatusAttributeValueChange Notification.
    1:
-- 11.0 LNP Network Managed Object Class
InpNetwork MANAGED OBJECT CLASS
    DERIVED FROM "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2: 1992":top;
    CHARACTERIZED BY
        lnpNetworkPkg;
    CONDITIONAL PACKAGES
    lnpDownloadPkg PRESENT IF
        !the object is instantiated on the NPAC SMS!;
    REGISTERED AS {LNP-OIDS.lnp-objectClass 11};
lnpNetworkPkg PACKAGE
    BEHAVIOUR
        lnpNetworkDefinition,
        lnpNetworkBehavior;
    ATTRIBUTES
        lnpNetworkName GET;
lnpNetworkDefinition BEHAVIOUR
    DEFINED AS !
         The lnpNetwork class is the managed object that is used as the
         container object for the serviceProvNetwork objects.
         This object has been created primarily for scoping efficiency.
         The lnpDownloadPkg will only be used for lnpNetwork object
         instantiated on the NPAC SMS (Data Download Association Function).
         This package is used for initiating from the Local SMS downloading
        of serviceProvNetwork, serviceProvNPA-NXX, and serviceProvLRN object
         creation or deletion to the Local SMS from the NPAC SMS.
     1;
 lnpNetworkBehavior BEHAVIOUR
     DEFINED AS !
         Local SMS and NPAC SMS Managed Object used for the Local SMS to
         NPAC SMS interface.
         The Local SMS and the NPAC SMS can M-GET any lnpNetwork
         object (Data Download Association Function). The lnpNetworkName
         attribute is read only and can not be changed via the NPAC SMS
         to Local SMS Interface once the object has been created. The
         value of lnpNetworkName will always be "lnpNetwork".
         Only one of these objects will exist and it will only be
         created at startup of the CMIP agent software on the NPAC SMS
         or the Local SMS.
     ! :
```

```
-- 12.0 LNP NPAC SMS Managed Object Class
lnpnpac-sms managed object class
    DERIVED FROM "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2 : 1992":top;
    CHARACTERIZED BY
        lnpNPAC-SMS-Pkg,
        lnpRecoveryCompletePkg;
    REGISTERED AS {LNP-OIDS.lnp-objectClass 12};
lnpNPAC-SMS-Pkg PACKAGE
    BEHAVIOUR
        lnpNPAC-SMS-Definition,
        lnpNPAC-SMS-Behavior;
    ATTRIBUTES
        lnpNPAC-SMS-Name GET;
    NOTIFICATIONS
        lnpNPAC-SMS-Operational-Information;
lnpNPAC-SMS-Definition BEHAVIOUR
    DEFINED AS !
         The lnpNPAC-SMS class is the managed object that is used as
         the container object for all NPAC SMS objects in the NPAC SMS to
        Local SMS Interface and the SOA to NPAC SMS interface.
     !;
lnpNPAC-SMS-Behavior BEHAVIOUR
     DEFINED AS !
         NPAC SMS Managed Object for the SOA to NPAC SMS and the Local SMS
         to NPAC SMS interface.
         A Local SMS (Data Download Association Function) and service
         provider SOA (SOA Management Association Function) can M-GET
         any lnpNPAC-SMS object.
         The lnpNPAC-SMS-Name attribute is read only and can not be
         changed via either Interface once the object has been created.
         The value of lnpNPAC-SMS-Name will be set to "Illinois-NPAC-SMS"
         in Illinois.
         The lnpRecoveryComplete-Pkg is used to used for indicating the recovery mode for the Local SMS is complete and to return all
         updates made since the recovery mode began. (Data Download Functional
         Group).
         Only one of these objects will exist and it will only be
         created at startup of the CMIP agent software on the NPAC SMS.
         The lnpNPAC-SMS-Operational-Information will be used to notify
         service provider SOA and Local SMS systems of planned outages.
     !;
 -- 13.0 LNP Service Providers Managed Object Class
 InpServiceProvs MANAGED OBJECT CLASS
     DERIVED FROM "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2 : 1992":top;
     CHARACTERIZED BY
         lnpServiceProvsPkg;
     REGISTERED AS {LNP-OIDS.lnp-objectClass 13};
 lnpServiceProvsPkg PACKAGE
     BEHAVIOUR
         lnpServiceProvsDefinition,
         lnpServiceProvsBehavior;
     ATTRIBUTES
         lnpServiceProvsName GET;
```

```
InpServiceProvsDefinition BEHAVIOUR
    DEFINED AS !
        The lnpServiceProvs class is the managed object that is
        used as the container object for the serviceProv
        objects on the NPAC SMS. This object has been created
        for scoping efficiency.
    !:
lnpServiceProvsBehavior BEHAVIOUR
    DEFINED AS !
        NPAC SMS Managed Object used for the Local SMS to NPAC
        SMS interface.
        A Local SMS and service provider SOA can M-GET any
        lnpServiceProvs object (Network Data Association Function).
        The lnpServiceProvsName attribute is read only and can not
        be changed via the Local SMS Interface once the object has
        been created. The value of lnpServiceProvsName will
        always be "lnpServiceProvs".
        Only one of these objects will exist and it will only be created
        at startup of the CMIP agent software on the NPAC SMS.
    1:
-- 14.0 LNP Subscriptions Managed Object Class
InpSubscriptions MANAGED OBJECT CLASS
    DERIVED FROM "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2 : 1992":top;
    CHARACTERIZED BY
        lnpSubscriptionsPkg,
        subscriptionVersionLocalSMS-CreatePkg;
    CONDITIONAL PACKAGES
    lnpDownloadPkg PRESENT IF
        !the object is instantiated on the NPAC SMS!,
    subscriptionVersionOldSP-CreatePkg PRESENT IF
        !the object is instantiated on the NPAC SMS!,
    subscriptionVersionNewSP-CreatePkg PRESENT IF
        !the object is instantiated on the NPAC SMS!,
    subscriptionVersionDisconnectPkg PRESENT IF
         !the object is instantiated on the NPAC SMS!,
    subscriptionVersionModifyPkg PRESENT IF
         !the object is instantiated on the NPAC SMS!,
    subscriptionVersionActivatePkg PRESENT IF
        !the object is instantiated on the NPAC SMS!,
    subscriptionVersionCancelPkg PRESENT IF
        !the object is instantiated on the NPAC SMS!,
    subscriptionVersionOldSP-CancellationPkg PRESENT IF
         !the object is instantiated on the NPAC SMS!,
    subscriptionVersionNewSP-CancellationPkg PRESENT IF
         !the object is instantiated on the NPAC SMS!,
     subscriptionVersionRemoveFromConflictPkg PRESENT IF
         !the object is instantiated on the NPAC SMS!;
    REGISTERED AS {LNP-OIDS.lnp-objectClass 14};
 lnpSubscriptionsPkg PACKAGE
    BEHAVIOUR
         lnpSubscriptionsDefinition,
         lnpSubscriptionsBehavior;
     ATTRIBUTES
         lnpSubscriptionsName GET;
     NOTIFICATIONS
         subscriptionVersionLocalSMS-ActionResults;
 lnpSubscriptionsDefinition BEHAVIOUR
```

DEFINED AS !

Local SMS and NPAC SMS Managed Object for the SOA to NPAC SMS and the Local SMS to NPAC SMS interface.

The lnpSubscriptions class is the managed object that is used as the container object for the subscription version objects on the NPAC SMS and the Local SMS.

Local SMS interfaces must be able to support scope/filtered M-SETs and M-DELETEs with a TN range as the primary filter.

!;

lnpSubscriptionsBehavior BEHAVIOUR DEFINED AS !

Local SMS and NPAC SMS Managed Object

The Local SMS (Data Download Association Function) and the service provider SOA (SOA Management Association Function) can M-GET any lnpSubscriptions object. The lnpSubscriptionsName attribute is read only and can not be changed via the Local SMS Interface once the object has been created. The value of lnpSubscriptionsName will always be "lnpSubscriptions".

Only one of these objects will exist and it will only be created at startup of the CMIP agent software on the NPAC SMS or the Local SMS.

The lnpDownloadPkg will only be used for a lnpSubscriptions object instantiated on the NPAC SMS. This package is used to used for initiating downloading of subscriptionVersions object creation, deletion, or modifications to the Local SMS (Data Download Association Function).

The subscriptionVersionOldSP-CreatePkg will only be used for a lnpSubscriptions object instantiated on the NPAC SMS. This package is used for creation of subscription versions for porting TNs by the old service provider.

The subscriptionVersionNewSP-CreatePkg will only be used for a lnpSubscriptions object instantiated on the NPAC SMS. This package is used for creation of subscription versions for porting TNs by the new service provider.

The subscriptionVersionDisconnectPkg will only be used for a lnpSubscriptions object instantiated on the NPAC SMS. This package is used for disconnection of a ported TN by the current service provider.

The subscriptionVersionModifyPkg will only be used for a lnpSubscriptions object instantiated on the NPAC SMS. This package is used for modification of a ported TN by a service provider.

The subscriptionVersionActivatePkg will only be used for a lnpSubscriptions object instantiated on the NPAC SMS. This package is used for activation of a ported TN by a new service provider.

The subscriptionVersionCancelPkg will only be used for a lnpSubscriptions object instantiated on the NPAC SMS. This package is used for cancellation of a ported TN by a service provider.

The subscriptionVersionOldSP-CancellationPkg will only be used for a lnpSubscriptions object instantiated on the NPAC SMS. This package is used for acknowledgment of subscription versions

```
with status values of cancel-pending. Acknowledgments
       from both old and new service provider SOAs take a version from
       cancel-pending and to a canceled state. This action is used by
       the old service provider SOA.
       The subscriptionVersionNewSP-CancellationPkg will only be
       used for a lnpSubscriptions object instantiated on the NPAC SMS.
       This package is used for acknowledgment of subscription versions
       with status values of cancel-pending. Acknowledgments
       from both old and new service provider SOAs take a version out of cancel-pending and to a canceled state. This action is used by
        the new service provider SOA.
        The subscriptionVersionRemoveFromConflictPkg will only be
        used for a lnpSubscriptions object instantiated on the NPAC SMS.
        This package is used for setting the status of subscription versions
        with status values of conflict to pending. This action is used by
        either the new or old service provider SOA.
    1:
-- 15.0 LNP Service Provider Managed Object Class
serviceProv MANAGED OBJECT CLASS
    DERIVED FROM serviceProvNetwork;
    CHARACTERIZED BY
        serviceProvPkg;
    CONDITIONAL PACKAGES
        serviceProvBillingAddressPkg PRESENT IF
            !the service provider has billing address and contact
            information!,
        serviceProvSOA-AddressPkg PRESENT IF
            !the service provider has SOA address and contact information!,
        serviceProvLSMS-AddressPkg PRESENT IF
            !the service provider has LSMS address and contact information!,
        serviceProvWebAddressPkg PRESENT IF
            !the service provider has Web address and contact information!,
        serviceProvNetAddressPkg PRESENT IF
             the service provider has network and communication facilities!
            address and contact information!.
        serviceProvConflictAddressPkg PRESENT IF
            !the service provider has conflict resolution interface
            address and contact information!,
        serviceProvOperationsAddressPkg PRESENT IF
            !the service provider has operations address and contact
            information!.
        serviceProvRepairCenterInfoPkg PRESENT IF
             !the service provider has repair contact information!,
        serviceProvSecurityAddressPkg PRESENT IF
             !the service provider has security contact information!,
         serviceProvUserAdminAddressPkg PRESENT IF
             !the service provider has user administration interface address
             and contact information!;
    REGISTERED AS {LNP-OIDS.lnp-objectClass 15};
serviceProvPkg PACKAGE
    BEHAVIOUR
         serviceProvDefinition,
         serviceProvBehavior;
    ATTRIBUTES
        npacCustomerAllowableFunctions GET-REPLACE,
         serviceProvAddress GET-REPLACE,
         serviceProvSysLinkInfo GET-REPLACE;
serviceProvDefinition BEHAVIOUR
```

DEFINED AS !

The serviceProv class is the managed object

```
used on the NPAC SMS to contain the data related to each
       LNP service provider.
    1 :
serviceProvBehavior BEHAVIOUR
    DEFINED AS
        NPAC SMS Managed Object used for the Local SMS to NPAC
        SMS interface.
        A Local SMS and service provider SOA can M-GET their own
        serviceProv object (Network Data Association Function).
        Attempts to read any service provider information other
        than their own will be rejected as unauthorized. All attributes
        in this object, except serviceProvID and
        npacCustomerAllowableFunctions can be M-SET by the Local SMS
        Interface once the object has been created on the NPAC SMS.
    ! :
-- 16.0 LNP Service Provider LRN Managed Object Class
serviceProvLRN MANAGED OBJECT CLASS
    DERIVED FROM "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2 : 1992":top;
    CHARACTERIZED BY
        serviceProvLRN-Pkg;
    REGISTERED AS {LNP-OIDS.lnp-objectClass 16};
serviceProvLRN-Pkg PACKAGE
    BEHAVIOUR
        serviceProvLRN-Definition,
        serviceProvLRN-Behavior;
    ATTRIBUTES
        serviceProvLRN-ID GET.
        serviceProvLRN-Value GET,
        serviceProvDownloadReason GET,
        serviceProvLRN-CreationTimeStamp GET;
serviceProvLRN-Definition BEHAVIOUR
     DEFINED AS !
         The serviceProvLRN class is the managed object
         used to identify Service Provider LRN values open for
     ! :
 serviceProvLRN-Behavior BEHAVIOUR
     DEFINED AS !
         Local SMS and NPAC SMS Managed Object used for the Local SMS to
         NPAC SMS interface.
         All attributes are read only. Once created, the serviceProvLRN
         object can only be deleted via the Local SMS or SOA interface.
         The serviceProvLRN-ID is specified by the NPAC SMS. The
         serviceProvLRN-CreationTimeStamp will reflect the current system
         date and time when the object is created.
         NPAC SMS can M-GET, M-DELETE and M-CREATE any
         serviceProvLRN object on the Local SMS (Network Data
         Functional Unit). The Local SMS only creates local
         copies of serviceProvLRN objects after receiving the
         objects from an NPAC SMS create request, reading them from
         the NPAC SMS for initial instantiation, or from a download request.
         A Local SMS or SOA can M-GET any serviceProvLRN object (Network Data
         Functional Unit).
```

The Local SMS can M-DELETE and M-CREATE any

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serviceProvLRN object on the NPAC SMS for their
       own service provider id (Network Data Functional Unit). Attempts
       to take actions on other service provider objects will be
       rejected as unauthorized.
       The creation or deletion of a serviceProvLRN object will be
       distributed to all Local SMSs.
       The serviceProvLRN-Value attributes on the NPAC SMS can
       not be modified by the Local SMS or SOA. The service
       provider will have to add a new object and delete the
        old one to modify the data.
    1:
-- 17.0 LNP Service Provider Network Managed Object Class
serviceProvNetwork MANAGED OBJECT CLASS
    DERIVED FROM "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2: 1992":top;
    CHARACTERIZED BY
        serviceProvNetworkPkg;
    REGISTERED AS {LNP-OIDS.lnp-objectClass 17};
serviceProvNetworkPkg PACKAGE
    BEHAVIOUR
        serviceProvNetworkDefinition,
        serviceProvNetworkBehavior;
    ATTRIBUTES
        serviceProvID GET,
        serviceProvName GET-REPLACE;
serviceProvNetworkDefinition BEHAVIOUR
    DEFINED AS !
        The serviceProvNetwork class is the managed object
        used to contain the network data for a service provider.
    !:
serviceProvNetworkBehavior BEHAVIOUR
    DEFINED AS !
        Local SMS and NPAC SMS Managed Object used for the Local SMS to
        NPAC SMS interface.
        Service providers and the NPAC SMS can M-GET, M-CREATE, and M-SET
        any serviceProvNetwork object (Network Data Association Function).
        The serviceProvId attribute is read only and can not be
        changed via the NPAC SMS to Local SMS Interface once the object
        has been created on the Local SMS or NPAC SMS. The
        serviceProvName can be M-SET via the NPAC SMS to Local
        SMS Interface by the NPAC SMS. The Local SMS only creates
        or modifies local copies of serviceProvNetwork objects
        after receiving the objects from an NPAC SMS M-CREATE or M-SET
        request or reading them from the NPAC SMS for initial instantiation.
     1:
-- 18.0 LNP Service Provider NPA-NXX Managed Object Class
serviceProvNPA-NXX MANAGED OBJECT CLASS
    DERIVED FROM "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2 : 1992":top;
     CHARACTERIZED BY
         serviceProvNPA-NXX-Pkg;
     REGISTERED AS {LNP-OIDS.lnp-objectClass 18};
 serviceProvNPA-NXX-Pkg PACKAGE
    BEHAVIOUR
         serviceProvNPA-NXX-Definition.
         serviceProvNPA-NXX-Behavior;
```

```
ATTRIBUTES
       serviceProvNPA-NXX-ID GET,
        serviceProvNPA-NXX-Value GET,
        serviceProvNPA-NXX-EffectiveTimeStamp GET,
        serviceProvDownloadReason GET,
        serviceProvNPA-NXX-CreationTimeStamp GET;
    ;
serviceProvNPA-NXX-Definition BEHAVIOUR
    DEFINED AS !
        The serviceProvNPA-NXX class is the managed object
        used to identify Service Provider NPA-NXX values open for
        porting.
    !;
serviceProvNPA-NXX-Behavior BEHAVIOUR
    DEFINED AS !
        Local SMS and NPAC SMS Managed Object used for the Local SMS to
        NPAC SMS interface.
        All attributes are read only. Once created, the serviceProvNPA-NXX
        object can only be deleted via the Local SMS or SOA interface. The
        serviceProvNPA-NXX-ID is specified by the NPAC SMS. The
        serviceProvNPA-NXX-CreationTimeStamp will be set to the current
        system date and time when the object is created.
        NPAC SMS can M-GET, M-DELETE and M-CREATE any
        serviceProvNPA-NXX object on the Local SMS (Network Data
        Association Function). The Local SMS only creates local copies of
        serviceProvNPA-NXX objects after receiving the objects from
        an NPAC SMS create, after reading them from the NPAC SMS for
        initial instantiation, or from a download.
        Service providers can M-GET any serviceProvNPA-NXX object.
        A Local SMS or SOA can M-DELETE and M-CREATE any
        serviceProvNPA-NXX object on the NPAC SMS for their own service
        provider id (Network Data Association Function). Attempts to
        take actions on other service provider objects will be rejected
        as unauthorized.
        A Local SMS or SOA can not modify any of the attributes.
        To cause an NPA-NXX split to occur the service provider must
        contact the NPAC SMS operations personnel.
     ! ;
-- 19.0 LNP Subscription Audit Managed Object
subscriptionAudit MANAGED OBJECT CLASS
    DERIVED FROM "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2 : 1992":top;
    CHARACTERIZED BY
         subscriptionAuditPkg;
    REGISTERED AS {LNP-OIDS.lnp-objectClass 19};
 subscriptionAuditPkg PACKAGE
    BEHAVIOUR
         subscriptionAuditDefinition,
         subscriptionAuditBehavior;
     ATTRIBUTES
         subscriptionAuditId GET,
         subscriptionAuditName GET.
         subscriptionAuditStatus GET,
         subscriptionAuditAttributeList GET,
         subscriptionAuditTN-Range GET,
         subscriptionAuditTN-ActivationRange GET,
         subscriptionAuditServiceProvIdRange GET,
```

```
subscriptionAuditNumberOfTNs GET,
       subscriptionAuditNumberOfTNsComplete GET,
       subscriptionAuditRequestingSP GET;
   NOTIFICATIONS
       subscriptionAuditResults,
        subscriptionAudit-DiscrepancyRpt,
        "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2 : 1992":attributeValueChange
            accessControlParameter,
        "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2 : 1992":objectCreation
            accessControlParameter,
        "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2 : 1992":objectDeletion
            accessControlParameter;
subscriptionAuditDefinition BEHAVIOUR
    DEFINED AS !
        The subscriptionAudit class is the managed object that
        represents a subscription audit request. This object is
        only instantiated on the NPAC SMS.
    1:
subscriptionAuditBehavior BEHAVIOUR
    DEFINED AS !
        When the subscriptionAuditStatus changes an attribute value
        change will be emitted to the audit requester.
```

All attributes must be specified upon create with the exception of the subscriptionAuditAttributeList and the subscriptionAuditTN-ActivationRange. If the subscriptionAuditAttributeList is not specified then a full audit is assumed. If the subscriptionAuditTN-ActivationRange is specified then an audit of all TNs in the range specified in subscriptionAuditTN-Range will be audited. The serviceAuditId is determined by the NPAC SMS.

The subscription Audit Requesting SP is the id of the service provider who requested the audit.

The NPAC SMS will be required to set the number of TNs that will be audited in the subscriptionAuditNumberOfTNs attribute based on the NPAC SMS audit request criteria. An attribute value change notification will be emitted when the subscriptionAuditNumberOfTNs is set.

The SOA or NPAC SMS can M-CREATE, M-GET subscriptionAudit managed objects on the NPAC SMS (SOA Management Function). When a subscriptionAudit object is created on the NPAC SMS the NPAC SMS will begin the audit for the service provider specified or all service providers. The SOA can only M-GET subscriptionAudit that they created.

The SOA will be required to set the requesting SP with their service provider id so that the origination of the audit request can be tracked and notifications can be sent to the requesting SOA.

The subscriptionAuditTN-Range will be limited based on the maximum range size specified in the NPAC SMS. If the limit specified is exceeded, the create request will fail with an invalidAttributeValue error.

When this object is created and deleted, object creation and deletion notifications will be sent to the requester. Object deletion indicates completion of an audit. The audit results notification will be sent before the object is deleted by the entity performing the audit indicating how may discrepancies the audit found and reported during execution.

```
If discrepancies are found during the audit, audit discrepancy
       notifications will be sent to the requester at the time they
       are found. When audit discrepancy notifications are sent to
       the NPAC SMS by the Local SMS, create or modify requests will be
       sent to the Local SMS by the NPAC SMS to correct the
       discrepancies found.
       Deletion of an audit object cancels an audit request.
    1;
-- 20.0 LNP subscription Version Managed Object Class
subscriptionVersion MANAGED OBJECT CLASS
    DERIVED FROM "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2: 1992":top;
    CHARACTERIZED BY
        subscriptionVersionPkg;
    REGISTERED AS {LNP-OIDS.lnp-objectClass 20};
subscriptionVersionPkg PACKAGE
    BEHAVIOUR
        subscriptionVersionDefinition,
        subscriptionVersionBehavior;
    ATTRIBUTES
        subscriptionVersionId GET,
        subscriptionTN GET-REPLACE,
        subscriptionLRN GET-REPLACE,
        subscriptionNewCurrentSP GET-REPLACE,
        subscriptionActivationTimeStamp GET-REPLACE,
        subscriptionCLASS-DPC GET-REPLACE,
        subscriptionCLASS-SSN GET-REPLACE,
        subscriptionLIDB-DPC GET-REPLACE,
        subscriptionLIDB-SSN GET-REPLACE,
        subscriptionCNAM-DPC GET-REPLACE,
        subscriptionCNAM-SSN GET-REPLACE,
        subscriptionISVM-DPC GET-REPLACE,
        subscriptionISVM-SSN GET-REPLACE,
        subscriptionEndUserLocationValue GET-REPLACE,
        subscriptionEndUserLocationType GET-REPLACE,
        subscriptionBillingId GET-REPLACE,
        subscriptionLNPType GET-REPLACE,
        subscriptionDownloadReason GET-REPLACE;
    ;
subscriptionVersionDefinition BEHAVIOUR
    DEFINED AS !
        The subscriptionVersion class is the managed object that
        represents a subscription version on the Local SMS.
    1;
subscriptionVersionBehavior BEHAVIOUR
    DEFINED AS !
        Local SMS Managed Object
        NPAC SMS can M-GET (Query Association Function), M-SET, M-DELETE
         and M-CREATE (Data Download Association Function) any
         subscriptionVersion object on the Local SMS (Data Download
         Association Function). The Local SMS only creates local copies
         of subscriptionVersion objects after receiving the objects from an
         NPAC SMS create request or reading them from the NPAC SMS for
         initial instantiation.
         The serviceProvVersionId with subscriptionVersionId is assigned
         upon creation by the NPAC SMS and is read only.
```

The subscriptionTN, subscriptionLRN and associated routing

information, are specified by the new service provider SOA upon creation of a new subscription version.

The subscriptionActivationTimeStamp is the time when the subscription version was activated by the new service provider.

When the subscription version is downloaded to the locals, the subscriptionDownloadReason is set to one of new, delete, modified, or audit-discrepancy. This field is not validated in audits.

When the subscription version status is set to disconnect pending or old, the subscriptionVersionDonorSP-CustomerDisconnectDate is sent to the donor SOA informing the service provider of the actual customer disconnect date.

The Local SMS can not modify any of the subscription version data locally unless changes were downloaded via a download request.

```
!;
-- 21.0 LNP NPAC Subscription Version Managed Object Class
subscriptionVersionNPAC MANAGED OBJECT CLASS
    DERIVED FROM subscriptionVersion;
    CHARACTERIZED BY
        subscriptionVersionNPAC-Pkg;
    REGISTERED AS {LNP-OIDS.lnp-objectClass 21};
subscriptionVersionNPAC-Pkg PACKAGE
    BEHAVIOUR
        subscriptionVersionNPAC-Definition,
        subscriptionVersionNPAC-Behavior;
    ATTRIBUTES
        subscriptionVersionStatus GET-REPLACE,
        subscriptionOldSP GET-REPLACE.
        subscriptionNewSP-DueDate GET-REPLACE,
        subscriptionNewSP-CreationTimeStamp GET-REPLACE,
        subscriptionOldSP-DueDate GET-REPLACE,
        subscriptionOldSP-Authorization GET-REPLACE,
        subscriptionStatusChangeCauseCode GET-REPLACE,
        subscriptionOldSP-AuthorizationTimeStamp GET-REPLACE.
        subscriptionBroadcastTimeStamp GET-REPLACE,
        subscriptionConflictTimeStamp GET-REPLACE,
        subscriptionCustomerDisconnectDate GET-REPLACE,
        subscriptionEffectiveReleaseDate GET-REPLACE,
        subscriptionDisconnectCompleteTimeStamp GET-REPLACE,
        subscriptionCancellationTimeStamp GET-REPLACE,
        subscriptionCreationTimeStamp GET-REPLACE,
        subscriptionFailed-SP-List GET-REPLACE,
        subscriptionModifiedTimeStamp GET-REPLACE,
        subscriptionOldTimeStamp GET-REPLACE,
        subscriptionOldSP-CancellationTimeStamp GET-REPLACE,
        subscriptionNewSP-CancellationTimeStamp GET-REPLACE,
        subscriptionOldSP-ConflictResolutionTimeStamp GET-REPLACE,
         subscriptionNewSP-ConflictResolutionTimeStamp GET-REPLACE,
         subscriptionPortingToOriginal-SPSwitch GET-REPLACE,
         subscriptionPreCancellationStatus GET-REPLACE;
    NOTIFICATIONS
         subscriptionVersionOldSP-ConcurrenceRequest,
         subscriptionVersionNewSP-CreateRequest,
         subscriptionVersionNewNPA-NXX,
         {\tt subscriptionVersionCancellationAcknowledgeRequest,}
         subscriptionVersionDonorSP-CustomerDisconnectDate,
         {\tt subscriptionVersionStatusAttributeValueChange,}
         "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2 : 1992":attributeValueChange
```

accessControlParameter,

"CCITT Rec. X.721 (1992) | ISO/IEC 10165-2 : 1992":objectCreation accessControlParameter;

;

subscriptionVersionNPAC-Definition BEHAVIOUR DEFINED AS !

The subscriptionVersionNPAC class is the managed object that represents a subscription version on the NPAC SMS.

subscriptionVersionNPAC-Behavior BEHAVIOUR
DEFINED AS !

NPAC SMS Managed Object for the SOA to NPAC SMS and the Local SMS to NPAC SMS interface.

A Local SMS can M-GET any subscriptionVersionNPAC objects from the NPAC SMS via the Local SMS Interface (Data Download Association Function).

A Service Provider SOA can M-GET any subscriptionVersionNPAC objects from the NPAC SMS via the SOA Interface (SOA Management Association Function).

If a Service Provider SOA or Local SMS does a scoped filtered M-GET for subscription versions, this request will only be successful if a the number of records to be returned is less than or equal to the NPAC SMS tunable parameter, "Max Subscriber Query", in the Service Data table.

When the status of an object is changed to "cancel-pending", subscriptionPreCancellationStatus is first set to the current status.

The subscriptionCreationTimeStamp is set to the current system time when the object is created.

When the subscription version is modified for any reason, the subscriptionModifiedTimeStamp is updated with the current system time.

When the subscription version is broadcast to Local SMSs via the NPAC to Local SMS interface, the subscriptionBroadcastTimeStamp is updated with the current system time.

When the subscription version has its version status set to old, the subscriptionOldTimeStamp is updated with the current system time.

When the subscription version has its version status set to cancel, the subscriptionCancellationTimeStamp is updated with the current system time.

When the subscription version has its version status set to conflict, the subscriptionConflictTimeStamp is updated with the current system time.

When the subscription version is disconnected and the version status is set to old, the subscriptionDisconnectCompleteTimeStamp is updated with the current system time.

When the subscription version status is set to disconnect pending the subscriptionEffectiveReleaseDate is set to the date the disconnect should be broadcast.

When the subscription version in a cancel-pending state is acknowledged by an old service provider SOA, the subscriptionOldSP-CancellationTimeStamp is updated with the current system time.

When the subscription version in a cancel-pending state is acknowledged by a new service provider SOA, the subscriptionNewSP-CancellationTimeStamp is updated with the current system time.

When the subscription version in a conflict state is removed from conflict by the old service provider SOA, the subscriptionOldSP-ConflictResolutionTimeStamp is updated with the current system time.

When the subscription version in a conflict state is removed from conflict by the new service provider SOA, the subscriptionNewSP-ConflictResolutionTimeStamp is updated with the current system time.

When the subscription version status is failed or partially-failed, the subscriptionFailed-SP-List is populated with a list of the failed service providers.

The Service Provider SOA can M-GET and M-SET subscriptionVersionNPAC objects via the SOA to NPAC SMS interface (SOA Management Association Function). Rules for M-SET are described below.

For M-GET requests, the filter will support all attributes for a specified ported ${\tt TN}$.

Any service provider SOA can view any subscription version for any ported TN (SOA Management Association Function).

Subscription versions are created on the NPAC SMS via actions over the SOA to NPAC SMS interface to the lnpSubscriptions object (SOA Management Association Function). New service provider SOAs must use the subscriptionVersionNewSP-Create action and old service provider SOAs must use the subscriptionVersionOldSP-Create action. Creates can only be performed provided there is only one currently active subscription version for the TN.

subscriptionPortingToOriginal-SPSwitch can only be specified as TRUE for a TN that is currently ported and is being ported back to the original service provider. If the value of subscriptionPortingToOriginal-SPSwitch is TRUE, the LRN and GTT data should not be specified. This data is not specified because when the activate occurs for the subscription version, the Local SMS will receive requests to delete the old subscription version routing data in their networks and they will not receive any new network routing data for the subscription. Concurrence from the old service provider is required.

If the port of the subscription version is an intra-service provider port, the new service provider SOA can use the subscriptionVersionNewSP-Create action specifying the old service provider equal to the new service provider. In this case, the old service provider create action is not required and processing proceeds after a valid pending version is created in the same manner as it does for inter-service provider porting.

Once a version has been created that passes validation, the subscriptionVersionNPAC object subscriptionVersionStatus will be set to pending and an object creation notification will be sent to both old and new service provider SOAs. If a version previously existed, attribute value change notifications will be sent to both old and new service provider SOAs.

If there is a pending version that does not have concurrence during the "Service Provider Concurrence Window" specified in the Service Data table, a subscriptionVersionNoConcurrence notification will be sent to the service provider SOA that has not responded. The subscriptionVersionStatus will be set to cancel-pending if the new service provider SOA has not responded or to conflict if the old service provider SOA has not responded after the "Service Provider Concurrence Failure Window" specified in the Service Data table. An attribute value change will be sent to the service provider SOA that sent the original create request.

The Service Provider SOA can M-SET attributes associated with pending, or conflict subscription versions (SOA Management Association Function).

Attempts to modify an active, sending, failed, canceled, cancel-pending, disconnect-pending or old version using M-SET will result in an access denied error.

Modification of an active subscription can only be done by the current/new service provider SOA using the subscriptionVersionModify action.

The modify action can be used by both old and new service provider SOAs to update pending or conflict subscription versions.

Old service provider SOAs can only modify the following attributes:

subscriptionOldSP-DueDate
subscriptionOldSP-Authorization
subscriptionStatusChangeCauseCode

New service provider SOAs can only modify the following attributes:

subscriptionLRN
subscriptionNewSP-DueDate
subscriptionCLASS-DPC
subscriptionCLASS-SSN
subscriptionLIDB-DPC
subscriptionLIDB-SSN
subscriptionCNAM-DPC
subscriptionCNAM-SSN
subscriptionISVM-DPC
subscriptionISVM-SSN
subscriptionISVM-SSN
subscriptionISVM-SSN
subscriptionISVM-SSN
subscriptionEndUserLocationValue
subscriptionEndUserLocationType
subscriptionBillingId

Validation will be done for both old and new service provider data that is specified on an M-SET. If validation fails, no changes will be made and a processing failure will be returned. If the version passes validation, the version status will be set to pending. An error message will be returned to the service provider if the status is not pending when they attempt to change the version status to cancel-pending.

Once a pending version has been created, the new service provider can activate the subscription version if authorization for the port has been received by the old service provider within the "Service Provider Concurrence Cancellation Window".

Once the version is activated, the version status is set to sending, the broadcast time stamp is updated, and creates are sent to the Local SMSs.

If the create requests are successful for all Local SMSs, the version status will be marked as active and the previously active subscription version will have its version status set to old.

If create requests fail for a subscription version after the retry periods have expired, the version status will be set

to failed or partially-failed based on if the download failed in all or some of the Local SMSs respectively.

A status version attribute value change will be sent to both old and new service providers when the subscriptionVersionStatus is modified. If the version status is failed or partially-failed then a list of failed service providers is provided in the subscriptionVersionStatus notification.

A subscription version can be put into conflict by either the NPAC SMS or by the old service provider explicitly setting the subscriptionOldSP-Authorization off or by not responding with the subscriptionVersionOldSP-Create action.

If the old service provider explicitly sets the subscriptionOldSP-Authorization off, the subscriptionStatusChangeCauseCode must be given.

The old service provider can only put a subscription version into conflict once and only by explicitly setting the subscriptionOldSP-Authorization off.

A service provider should acknowledge the conflict resolution pending state within a tunable time frame specified on the NPAC SMS with a conflict resolution acknowledgement action.

A service provider should acknowledge the cancel pending state within a tunable time frame specified on the NPAC SMS with a cancel acknowledgement action.

If a service provider SOA fails to acknowledge the cancel pending state, a subscriptionVersionCancellationAcknowledgeRequest is sent to the service provider SOA. If they do not respond to this acknowledgement in a tunable time frame specified on the NPAC SMS, the version status will be set to conflict.

Attribute value change notifications will be sent to both service provider SOAs when the following attribute values change for a pending, cancel-pending, conflict or disconnect-pending subscription versions:

subscriptionNewSP-DueDate subscriptionNewSP-CreationTimeStamp subscriptionOldSP-DueDate subscriptionOldSP-Authorization subscriptionOldSP-AuthorizationTimeStamp $\verb|subscriptionStatusChangeCauseCode|\\$ subscriptionVersionStatus

Object creation notifications will be sent to both old and new service provider SOAs when a subscriptionVersionNPAC associated with their Service Provider id is created. Object deletion notifications will not be used. Objects will only be deleted by the NPAC SMS as a result of housekeeping processing.

Prior to when the subscription version status is set to disconnect pending or old, the subscriptionVersionDonorSP-CustomerDisconnectDate is sent to the donor SOA informing the service provider of the actual customer disconnect date.

-- 22.0 LNP Log Record for the Subscription Version Donor Service Provider Customer Disconnect Date Notification

lnpLogDonorSP-CustomerDisconnectDateRecord MANAGED OBJECT CLASS DERIVED FROM "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2: 1992":eventLogRecord;

```
CHARACTERIZED BY
        lnpLogDonorSP-CustomerDisconnectDatePkg;
    REGISTERED AS {LNP-OIDS.lnp-objectClass 22};
lnpLogDonorSP-CustomerDisconnectDatePkg PACKAGE
    BEHAVIOUR
        lnpLogDonorSP-CustomerDisconnectDateDefinition,
        lnpLogDonorSP-CustomerDisconnectDateBehavior;
    ATTRIBUTES
        subscriptionTN GET,
        subscriptionVersionId GET,
        subscriptionCustomerDisconnectDate GET,
        subscriptionEffectiveReleaseDate GET,
        accessControl GET;
lnpLogDonorSP-CustomerDisconnectDateDefinition BEHAVIOUR
    DEFINED AS !
        The lnpLogDonorSP-CustomerDisconnectDateRecord class is the managed
        object that is used to create log records for the
        subscriptionVersionDonorSP-CustomerDisconnectDate Notification.
    1:
lnpLogDonorSP-CustomerDisconnectDateBehavior BEHAVIOUR
    DEFINED AS !
        This log record can be used by any CME wanting to log the
        subscriptionVersionDonorSP-CustomerDisconnectDate Notification.
-- 23.0 LNP Log Record for the Subscription Version Local SMS Action Results
        Notification
lnpLogLocalSMS-ActionResultsRecord MANAGED OBJECT CLASS
    DERIVED FROM "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2 : 1992":eventLogRecord;
    CHARACTERIZED BY
         lnpLogLocalSMS-ActionResultsPkg;
    REGISTERED AS {LNP-OIDS.lnp-objectClass 23};
lnpLogLocalSMS-ActionResultsPkg PACKAGE
    BEHAVIOUR
         lnpLogLocalSMS-ActionResultsDefinition,
         lnpLogLocalSMS-ActionResultsBehavior;
    ATTRIBUTES
         actionId GET,
         actionResultsStatus GET,
         failedTN-List GET,
         resultsCompletionTime GET,
         accessControl GET;
     ;
 lnpLogLocalSMS-ActionResultsDefinition BEHAVIOUR
         The lnpLogLocalSMS-ActionResultsRecord class is the managed
         object that is used to create log records for the
         subscriptionVersionLocalSMS-ActionResults Notification.
 lnpLogLocalSMS-ActionResultsBehavior BEHAVIOUR
     DEFINED AS !
         This log record can be used by any CME wanting to log the
         subscriptionVersionLocalSMS-ActionResults Notification.
     !;
 -- 24.0 LNP Log Record for the Subscription Version New NPA-NXX Notification
 lnpLogNewNPA-NXXRecord MANAGED OBJECT CLASS
     DERIVED FROM "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2: 1992":eventLogRecord;
```

```
CHARACTERIZED BY
        lnpLogNewNPA-NXXPkg;
   REGISTERED AS {LNP-OIDS.lnp-objectClass 24};
lnpLogNewNPA-NXXPkg PACKAGE
    BEHAVIOUR
        lnpLogNewNPA-NXXDefinition,
        lnpLogNewNPA-NXXBehavior;
    ATTRIBUTES
        serviceProvNPA-NXX-ID GET,
        serviceProvNPA-NXX-Value GET,
        serviceProvNPA-NXX-EffectiveTimeStamp GET,
        serviceProvID GET,
        accessControl GET;
lnpLogNewNPA-NXXDefinition BEHAVIOUR
    DEFINED AS !
        The lnpLogNewNPA-NXX class is the managed
        object that is used to create log records for the
        subscriptionVersionNewNPA-NXX Notification.
    !;
InpLogNewNPA-NXXBehavior BEHAVIOUR
    DEFINED AS !
        This log record can be used by any CME wanting to log the
        subscriptionVersionNewNPA-NXX Notification.
-- 25.0 LNP Service Provider NPA-NXX Managed Object Class
lsmsFilterNPA-NXX MANAGED OBJECT CLASS
    DERIVED FROM "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2 : 1992":top;
    CHARACTERIZED BY
        lsmsFilterNPA-NXX-Pkg;
    REGISTERED AS {LNP-OIDS.lnp-objectClass 25};
lsmsFilterNPA-NXX-Pkg PACKAGE
    BEHAVIOUR
         lsmsFilterNPA-NXX-Definition,
        lsmsFilterNPA-NXX-Behavior;
    ATTRIBUTES
        lsmsFilterNPA-NXX-ID GET,
         lsmsFilterNPA-NXX-Value GET;
 lsmsFilterNPA-NXX-Definition BEHAVIOUR
     DEFINED AS !
         The lsmsFilterNPA-NXX class is the managed object
         used to identify the NPA-NXX values for which a service provider
         does not want to be informed of subscription version broadcasts.
 lsmsFilterNPA-NXX-Behavior BEHAVIOUR
     DEFINED AS !
         NPAC SMS Managed Object used for the Local SMS to NPAC SMS interface.
         All attributes are read only. Once created, the lsmsFilterNPA-NXX
         object can only be deleted via the Local SMS interface. The
         lsmsFilterNPA-NXX-ID is specified by the NPAC SMS.
         The Local SMS can M-DELETE, M-CREATE and M-GET any
         lsmsFilterNPA-NXX object on the NPAC SMS. (LSMS Network Data
         Association Function).
     !;
```

```
-- 26.0 LNP Log Record for the Subscription Version Final Concurrence
-- Timer Expiration
lnpLogOldSPFinalConcurrenceWindowExpirationRecord MANAGED OBJECT CLASS
    DERIVED FROM "CCITT Rec. X.721 (1992) | ISO/IEC 10165-2: 1992":eventLogRecord;
    CHARACTERIZED BY
        lnpLogOldSPFinalConcurrenceWindowExpirationPkg;
    REGISTERED AS {LNP-OIDS.lnp-objectClass 5};
lnpLogOldSPFinalConcurrenceWindowExpirationPkg PACKAGE
    BEHAVIOUR
        lnpLogOldSPFinalConcurrenceWindowExpirationDefinition,
        lnpLogOldSPFinalConcurrenceWindowExpirationBehavior;
    ATTRIBUTES
        subscriptionTN GET,
        subscriptionVersionId GET,
        accessControl GET;
lnpLogOldSPFinalConcurrenceWindowExpirationDefinition BEHAVIOUR
    DEFINED AS !
        The lnpLogOldSPFinalConcurrenceWindowExpirationRecord class is
        the managed object that is used to create log records for the
        \verb|subscriptionVersionOldSPF| in al Concurrence \verb|WindowExpiration| \\
        Notification.
    !:
lnpLogOldSPFinalConcurrenceWindowExpirationBehavior BEHAVIOUR
    DEFINED AS !
         This log record can be used by any CME wanting to log the
         {\tt subscriptionVersionOldSPFinalConcurrenceWindowExpiration}
        Notification.
    ! :
       7.3.
              - Name Binding Definitions
-- 1.0 LNP Audits Managed Object Name Bindings
 lnpAudits-lnpNPAC-SMS NAME BINDING
     SUBORDINATE OBJECT CLASS lnpAudits AND SUBCLASSES;
         SUPERIOR OBJECT CLASS lnpNPAC-SMS AND SUBCLASSES;
     WITH ATTRIBUTE lnpAuditsName;
     -- Note: Create through interface is not supported.
     -- Note: Delete through interface is not supported.
     REGISTERED AS {LNP-OIDS.lnp-nameBinding 1};
 lnpAudits-lnpLocalSMS NAME BINDING
     SUBORDINATE OBJECT CLASS lnpAudits AND SUBCLASSES;
     NAMED BY
         SUPERIOR OBJECT CLASS inplocalSMS AND SUBCLASSES;
     WITH ATTRIBUTE lnpAuditsName;
     -- Note: Create through interface is not supported.
     -- Note: Delete through interface is not supported.
     REGISTERED AS {LNP-OIDS.lnp-nameBinding 2};
 -- 2.0 LNP Local SMS Managed Object Name Bindings
 lnpLocalSMS-root NAME BINDING
     SUBORDINATE OBJECT CLASS inplocalsMs AND SUBCLASSES;
     NAMED BY
         SUPERIOR OBJECT CLASS "CCITT Rec. X.660 (1992) | ISO/IEC 9834-1 : 1992":root;
     WITH ATTRIBUTE lnpLocal-SMS-Name;
```

```
-- Note: Create through interface is not supported.
    -- Note: Delete through interface is not supported.
    REGISTERED AS {LNP-OIDS.lnp-nameBinding 3};
-- 3.0 LNP Network Managed Object Name Bindings
lnpNetwork-lnpNPAC-SMS NAME BINDING
    SUBORDINATE OBJECT CLASS InpNetwork AND SUBCLASSES;
    NAMED BY
        SUPERIOR OBJECT CLASS lnpNPAC-SMS AND SUBCLASSES;
    WITH ATTRIBUTE lnpNetworkName;
    -- Note: Create through interface is not supported.
    -- Note: Delete through interface is not supported.
    REGISTERED AS {LNP-OIDS.lnp-nameBinding 4};
lnpNetwork-lnpLocalSMS NAME BINDING
    SUBORDINATE OBJECT CLASS InpNetwork AND SUBCLASSES;
    NAMED BY
        SUPERIOR OBJECT CLASS inplocalSMS AND SUBCLASSES;
    WITH ATTRIBUTE lnpNetworkName;
    -- Note: Create through interface is not supported.
    -- Note: Delete through interface is not supported.
    REGISTERED AS {LNP-OIDS.lnp-nameBinding 5};
-- 4.0 LNP NPAC SMS Managed Object Name Bindings
lnpNPAC-SMS-root NAME BINDING
    SUBORDINATE OBJECT CLASS lnpnpac-sms and subclasses;
    NAMED BY
        SUPERIOR OBJECT CLASS "CCITT Rec. X.660 (1992) | ISO/IEC 9834-1 : 1992":root;
    WITH ATTRIBUTE lnpNPAC-SMS-Name;
    -- Note: Create through interface is not supported.
    -- Note: Delete through interface is not supported.
    REGISTERED AS {LNP-OIDS.lnp-nameBinding 6};
 -- 5.0 LNP Service Providers Managed Object Name Bindings
lnpServiceProvs-lnpNPAC-SMS NAME BINDING
     SUBORDINATE OBJECT CLASS InpServiceProvs AND SUBCLASSES;
    NAMED BY
         SUPERIOR OBJECT CLASS lnpNPAC-SMS AND SUBCLASSES;
    WITH ATTRIBUTE lnpServiceProvsName;
     -- Note: Create through interface is not supported.
     -- Note: Delete through interface is not supported.
     REGISTERED AS {LNP-OIDS.lnp-nameBinding 7};
--- 6.0 LNP Subscriptions Managed Object Class Name Bindings
 lnpSubscriptions-lnpNPAC-SMS NAME BINDING
     SUBORDINATE OBJECT CLASS InpSubscriptions AND SUBCLASSES;
     NAMED BY
         SUPERIOR OBJECT CLASS lnpNPAC-SMS AND SUBCLASSES;
     WITH ATTRIBUTE lnpSubscriptionsName;
     -- Note: Create through interface is not supported.
     -- Note: Delete through interface is not supported.
     REGISTERED AS {LNP-OIDS.lnp-nameBinding 8};
 lnpSubscriptions-lnpLocalSMS NAME BINDING
     SUBORDINATE OBJECT CLASS Inpsubscriptions AND SUBCLASSES;
         SUPERIOR OBJECT CLASS inplocalSMS AND SUBCLASSES;
     WITH ATTRIBUTE lnpSubscriptionsName;
     -- Note: Create through interface is not supported.
     -- Note: Delete through interface is not supported.
     REGISTERED AS {LNP-OIDS.lnp-nameBinding 9};
 -- 7.0 LNP Service Provider Managed Object Class Name Bindings
```

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serviceProv-lnpServiceProvs NAME BINDING
    SUBORDINATE OBJECT CLASS serviceProv AND SUBCLASSES;
        SUPERIOR OBJECT CLASS ImpServiceProvs AND SUBCLASSES;
    WITH ATTRIBUTE serviceProvID;
    CREATE;
    DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
    REGISTERED AS {LNP-OIDS.lnp-nameBinding 10};
-- 8.0 LNP Service Provider LRN Managed Object Class Name Bindings
serviceProvLRN-serviceProvNetwork NAME BINDING
    SUBORDINATE OBJECT CLASS serviceProvLRN AND SUBCLASSES;
    NAMED BY
        SUPERIOR OBJECT CLASS serviceProvNetwork AND SUBCLASSES;
    WITH ATTRIBUTE serviceProvLRN-ID;
    CREATE WITH-AUTOMATIC-INSTANCE-NAMING;
    DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
    REGISTERED AS {LNP-OIDS.lnp-nameBinding 11};
-- 9.0 LNP Service Provider Network Managed Object Class Name Bindings
serviceProvNetwork-lnpNetwork NAME BINDING
    SUBORDINATE OBJECT CLASS serviceProvNetwork AND SUBCLASSES;
    NAMED BY
        SUPERIOR OBJECT CLASS InpNetwork AND SUBCLASSES;
    WITH ATTRIBUTE serviceProvID;
    CREATE;
    DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
    REGISTERED AS {LNP-OIDS.lnp-nameBinding 12};
-- 10.0 LNP Service Provider NPA-NXX Managed Object Class Name Bindings
serviceProvNPA-NXX-serviceProvNetwork NAME BINDING
    SUBORDINATE OBJECT CLASS serviceProvNPA-NXX AND SUBCLASSES;
    NAMED BY
        SUPERIOR OBJECT CLASS serviceProvNetwork AND SUBCLASSES;
    WITH ATTRIBUTE serviceProvNPA-NXX-ID;
    CREATE WITH-AUTOMATIC-INSTANCE-NAMING;
    DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
    REGISTERED AS {LNP-OIDS.lnp-nameBinding 13};
-- 11.0 LNP Subscription Audit for the NPAC SMS Managed Object
 subscriptionAudit-InpAudits NAME BINDING
     SUBORDINATE OBJECT CLASS subscriptionAudit AND SUBCLASSES;
    NAMED BY
         SUPERIOR OBJECT CLASS InpAudits AND SUBCLASSES;
     WITH ATTRIBUTE subscriptionAuditId;
     CREATE WITH-AUTOMATIC-INSTANCE-NAMING;
     DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
     REGISTERED AS {LNP-OIDS.lnp-nameBinding 14};
 -- 12.0 LNP Subscription Version Managed Object Class
 subscriptionVersion-lnpSubscriptions NAME BINDING
     SUBORDINATE OBJECT CLASS subscriptionVersion AND SUBCLASSES;
     NAMED BY
         SUPERIOR OBJECT CLASS InpSubscriptions AND SUBCLASSES;
     WITH ATTRIBUTE subscriptionVersionId;
     CREATE WITH-AUTOMATIC-INSTANCE-NAMING:
     DELETE ONLY-IF-NO-CONTAINED-OBJECTS;
     REGISTERED AS {LNP-OIDS.lnp-nameBinding 15};
 -- 13.0 LNP Service Provider LSMS Filter NPA-NXX Managed Object Class
```